REMARKS

Presently, claims 4-6, 55-56, 59-60, 75, 78-79 and 90-91 are pending in the application. Claims 7-8, 53-54, 57-58, 61-74, 76-77 and 80-89 have been canceled. Claims 4-6, 55-56 and 59-60 have been amended to more particularly point out the present invention. New claims 90-91 have been added to alternatively recite the present invention. Support for the amendments to claims 4-6, 55-56 and 59-60, and the features recited in new claims 90-91 may be found, for example, at page 19, lines 4-10 and at page 29, line 10 – page 31, line 19 of the specification. Claims 75 and 78-79 have been amended to depend from new independent claim 90. Accordingly, no new matter has been added to the application by the foregoing amendments.

Examiner Interview

Applicants thank Examiner Sheleheda for the courtesies extended during a personal interview conducted on February 23, 2005, to discuss the present application and Office Action. During the interview, proposed amendments to the claims were discussed. Applicants' reasons as to why such amendments overcome the Examiner's prior art rejections were also discussed. Such reasons are detailed below.

As a result of the interview, the Examiner stated that the proposed amendments and arguments with respect to claims 4 and 90 were understood and appeared to be compelling, but reserved the right to review Applicants' amendments and arguments in detail upon submission of a formal response. The amendments submitted herewith include the amendments discussed with the Examiner during the interview.

Claim Rejections – § 103(a)

The Examiner has rejected claims 53-57, 59-76 and 78-89 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,698,020 to Zigmond *et al.* ("Zigmond") in view of U.S. Patent Publication No. 2003/0200128 A1 Doherty ("Doherty"). As a result of the foregoing amendment, claims 53-54, 57, 61-74, 76 and 80-89 have been canceled and claims 55-56, 59-60, 75 and 78-79 have been amended to

depend from independent claim 4 and new independent claim 90, respectively. Accordingly, the Examiner's rejection of claims 53-57, 59-76 and 78-89 is moot.

The Examiner has rejected claims 4-8, 58 and 77 as being unpatentable over Zigmond in view of Doherty, and further in view of U. S. Patent No. 5,271,626 to Llenas *et al.* ("Llenas"). The Examiner contends that Zigmond teaches all features of the claimed invention with the exception of an ordered list of advertisements, inserting advertisements based on the ordered list and detecting a change in the size of an upcoming avail. The Examiner further contends that Doherty teaches an ordered list, and that Llenas teaches detecting a change in the size of an upcoming avail. The Examiner concludes that it would have been obvious to modify Zigmond's system to include an ordered list as taught by Doherty and detect a change in avail size as taught by Llenas, resulting in Applicants' claimed invention. Applicants respectfully traverse this rejection.

Zigmond teaches a system and method for selecting and inserting advertisements into a video programming feed, and is particularly directed to where and how ad selection is accomplished. In Zigmond, ads are delivered to the viewer by being multiplexed with the programming feed, transmitted over another, separate network, or periodically download to the insertion device. "Household data", including viewer, system and/or demographic information, characterizes the viewer, and is referenced to determine which ads should be inserted into the programming feed. The programming feed is interrupted by an "ad insertion device" that inserts the selected ad. Zigmond's system has the ability to select ads on demand.

Doherty teaches a method of scheduling "items of information" (including advertisements) intended for display to localized audiences (e.g., in public transport or waiting areas). In Doherty, each item is assigned a priority according to when it would be most useful to be displayed; the items are then scheduled for display based on their priority. The most suitable ads are determined by calculating priority as a function of time under the "current conditions", such as location, user profile, time remaining for display, etc. Doherty includes a user activity analyzer that monitors user interaction and develops a user profile to assist the scheduler. The priority determination is made "on the

run" to react to unpredictable user interaction. The current schedule of items is cleared, for example, when user interaction is detected or other triggering events (such as the beginning of the display period) occur.

Llenas teaches a system that automatically detects the end of programming and/or commercial in an effort to more efficiently utilize the "black space" between existing TV commercials. Llenas teaches inserting a detectable detection signal at the end or beginning of each program segment and each commercial to indicate that a black space will soon appear. Since the timing of the black spaces is thus determined, the detected black space is then used to insert additional messages, such as "clues" for an on-going TV mystery game. In an alternative embodiment, Llenas teaches using a light detector in the TV to physically detect the existence of a black space.

Independent claim 4, as amended, recites:

> A subscriber system for inserting unscheduled advertisements into at least one channel of media signals, the system comprising:
>
> an ad insertion device configured to determine an order in which the unscheduled advertisements are to be inserted into the at least one channel and insert the unscheduled advertisements into the at least one channel according to the order; and
>
> a watchdog module coupled to the ad insertion device, the watchdog module configured to detect a change in program content displayed on the at least one channel and output results of the detection to the ad insertion device, such that the ad insertion device modifies the order based on the results of the detection.

Zigmond does not teach or suggest an "ad insertion device configured to determine an order in which the unscheduled advertisements are to be inserted into the at least one channel." Initially, Applicants point out that Zigmond's system does not use or insert unscheduled ads. That is, the ads that are being inserted into the program stream in Zigmond are "scheduled" ads (i.e., ads that are associated with a particular advertisement space, time slot and/or program content). In contrast, the present invention inserts unscheduled ads – ads that may or may not be inserted into the program stream, since they are not associated with a particular advertisement space, time slot and/or program

content. Furthermore, as the Examiner acknowledges, Zigmond does not teach or suggest any device or method that determines an order in which the ads are to be displayed to the subscriber. Rather, Zigmond teaches simply selecting an advertisement from several available ads. Moreover, since Zigmond does not teach or suggest an order for ads to be displayed, Zigmond certainly does not teach an ad insertion device that modifies such an order based on a detected change in program content. Accordingly, Zigmond does not teach or suggest the features recited in independent claim 4.

Doherty also does not teach or suggest the insertion of unscheduled advertisements into a program stream. As with Zigmond, Doherty's system inserts scheduled ads into the program stream. Doherty teaches the creation of an ad schedule which is used for immediate presentation of the ads as determined by the schedule. The ad schedule is based on the assigned priority of each ad under the current conditions. The priority of the ads (and thus the ad schedule) are determined as a function of time (see, for example, paragraphs [0007] and [0025] of Doherty). Accordingly, Doherty's system generates a definite time-based schedule of which and when ads are to be inserted. However, as discussed above, the present invention inserts unscheduled ads. Furthermore, although Doherty specifies that ads are scheduled for delivery based their determined priority under the current conditions, Applicants respectfully submit that Doherty does not teach or suggest determining an order or list of unscheduled ads for insertion. Referring to paragraph [0025], Doherty suggests that the ads are prioritized and scheduled "at a particular instant in time rather than placing them in a queue." Thus, Doherty teaches away from the concept of using an order or queue to insert unscheduled advertisements into a program stream. Moreover, even if Doherty's system teaches determining an "order" or "queue" for the insertion of ads, Doherty does not teach or suggest modifying that order based on a detected "change in program content displayed." That is, the "current conditions" which Doherty's system uses to prioritize the advertisements and generate a schedule do not include the currently displayed program content. Thus, Doherty's schedule is not reordered or modified based on a change in displayed program content, as recited in claim 4. Accordingly, Doherty does not teach or suggest the features recited in independent claim 4.

For similar reasons discussed above with respect to Zigmond and Doherty, Llenas does not teach or suggest inserting unscheduled advertisements into a program stream. Additionally, Llenas does not teach or suggest creating a schedule, order or list of ads to be displayed or inserted, and thus also does not teach or suggest reordering such a schedule or list based on a change in the displayed program content. Accordingly, Llenas does not teach or suggest all of the features recited in independent claim 4.

Not only do Zigmond, Doherty and Llenas not individually teach the present invention, but, even if these references are taken in combination as suggested by the Examiner, such a combination fails to teach or suggest all of the features of claim 4. More specifically, none of the applied references teaches "an ad insertion device configured to determine an order in which the unscheduled advertisements are to be inserted...." Additionally, none of the applied references teaches advertisements in a list or order that is re-ordered based on a detected change in the displayed program content. As such, the combination of Zigmond, Doherty and/or Llenas is also lacking these features. Accordingly, independent claim 4 is believed to be allowable over the combination of Zigmond, Doherty and Llenas.

New independent claim 90 recites the steps of "generating a queue having unscheduled targeted advertisements to be presented to the subscriber, the queue indicating an order in which the advertisements are to be presented;... and reordering the queue according to the currently displayed program content." For the same reasons discussed above with respect to independent claim 4, Zigmond, Doherty and Llenas do not teach or suggest all of the elements of independent claim 90. Accordingly, independent claim 90 is believed to be allowable over Zigmond, Doherty and Llenas, both individually and in combination.

Dependent claims 5-6, 55-56, 59-60, 75, 78-79 and 91 are allowable at least by their dependency on independent claims 4 and 90, respectively. Claims 7-8, 58 and 77 have been canceled. Reconsideration and withdrawal of the Examiner's section 103(a) rejection are respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the Examiner's rejections have been overcome, and that the application, including claims 4-6, 55-56, 59-60, 75, 78-79 and 90-91, is in condition for allowance. Reconsideration and withdrawal of the Examiner's rejections and an early Notice of Allowance are respectfully requested.

Respectfully submitted,

Date: March 2, 2005 By: Charles A. Eldering

CHARLES A. ELDERING
Registration No. 39,180
Technology, Patents, & Licensing, Inc.
6206 Kellers Church Road
Pipersville, PA 18947
Telephone: 215-766-2100
Facsimile: 215-766-2920